

REMARKS/ARGUMENTS

Summary

In this Office Action, claims 1-27 stand rejected. Claims 1-6, 8-22, and 24-28 stand rejected under 35 U.S.C. § 103 as being unpatentable over Applicant's Admitted Prior Art (hereinafter "*AAPA*") in view of U.S. Patent 6,136,137 issued to Farnworth et al ("*Farnworth*"). Claims 7 and 23 stand rejected under § 103 as being unpatentable over *AAPA* in view of *Farnworth* and further in view of U.S. Patent 6,273,791 issued to Kataoka et al ("*Kataoka*"). Thus, claims 1-27 currently are pending.

In response, Applicant has amended independent claims 1 and 16, and cancelled claims 11 and 21. Said amendments are made in accordance with the suggested amendments set forth in the Office Action to place all pending claims in condition for allowance over the art of record. Therefore, Applicant submits that said claims and claims 2-10, 12-15, 17-20, and 22-27, which depend therefrom, are in condition for allowance.

Additionally, pursuant to the election of claims 1-27 responsive to the restriction requirement mailed November 16, 2005, Applicant herein cancels claims 28-30, without prejudice.

Amendments to the Claims

As mentioned previously, claims 1 and 16 have been amended in accordance with the suggested amendments set forth in the Office Action. No new matter has been introduced.

Claim Rejections under 35 U.S.C. § 103(a) – *AAPA/Farnworth*

Claims 1-6, 8-22, and 24-28 were rejected under § 103(a) as being unpatentable over *AAPA* in view of *Farnworth*. In response, Applicant has cancelled claims 11 and 21 rendering moot the rejections thereof. Additionally, Applicant has amended claims 1

and 16, placing said claims and claims 5-6, 8-10, 12-15, 17-20, 22, and 24-28, which depend therefrom, in condition for allowance.

Claim 1, as amended, is directed to a method of wafer grinding comprising, among other things, applying an adhesive gel material including semi-solid particles to at least a portion of a first side of a semiconductor wafer having first and second sides, the particles capable of allowing the adhesive gel material to release the semiconductor wafer and preventing substantial collapse of the adhesive gel material if a vacuum suction is applied to the first side of the semiconductor wafer. In addition, the method comprises, among other things, allowing the adhesive gel material to release the semiconductor wafer, substantially free of the adhesive gel material, from a platform.

Although *AAPA* discloses wafer-grinding in general, *AAPA* cannot be said to disclose or suggest the recited method of wafer grinding comprising, among other things, applying an adhesive gel material including particles capable of allowing the adhesive gel material to release the semiconductor wafer and preventing substantial collapse of the adhesive gel material if a vacuum suction is applied to a first side of the semiconductor wafer.

Farnworth does not remedy *AAPA*'s deficiency. Rather, *Farnworth* discloses the use an adhesive layer for holding dice after cutting into separate pieces. However, *Farnworth* cannot be said to disclose or suggest an adhesive having semi-solid particles capable of allowing the adhesive gel material to release the semiconductor wafer and preventing substantial collapse of the adhesive gel material if a vacuum suction is applied to a first side of the semiconductor wafer. Instead, *Farnworth* discloses an adhesive used in conjunction with cylindrical rods, the cylindrical rods sitting underneath the adhesive to support the adhesive upon application of a vacuum suction. Thus, *Farnworth* fails to disclose or suggest an adhesive gel having semi-solid particles, the particles capable of allowing the adhesive gel material to release the semiconductor

wafer and preventing substantial collapse of the adhesive gel material if a vacuum suction is applied to a first side of the semiconductor wafer.

Accordingly, for at least the foregoing reasons, independent claims 1 and 16 are patentable over *AAPA* and *Farnworth*, whether alone or in combination.

Claims 5-6, 8-10, 12-15, 17-20, 22, and 24-28 depend on either independent claim 1 and 16, incorporating their recitations respectively. Thus, for at least the same reasons, claims 5-6, 8-10, 12-15, 17-20, 22, and 24-28 also are patentable over *AAPA* and *Farnworth*, whether alone or in combination.

Claim Rejections under 35 U.S.C. § 103(a) – *AAPA/Farnworth/Kataoka*

Claims 7 and 23 stand rejected under § 103(a) as being unpatentable over *AAPA* in view of *Farnworth* and further in view of *Kataoka*. As noted previously, claims 1 and 16 are allowable over *AAPA* and *Farnworth*. *Kataoka* does not remedy the above-discussed deficiencies of *AAPA* and *Farnworth* and thus, for at least the same reasons, claims 1 and 16 remain allowable over *AAPA* and *Farnworth* even if combined with *Kataoka*. Claims 7 and 23 depend from one of claims 1 and 16 thereby incorporating the limitations contained therein. Therefore, claims 7 and 23 are patentable over *AAPA* and *Farnworth* even if combined *Kataoka* and thus are in proper form for allowance.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that claims 1-10, 12-20, and 22-27 are in condition of allowance. Thus, entry of the offered amendments and early issuance of Notice of Allowance is respectfully requested.

The Commissioner is hereby authorized to charge shortages or credit overpayments to Deposit Account No. 500393.

Respectfully submitted,
SCHWABE, WILLIAMSON & WYATT, P.C.

Dated: 08/03/2006

/Angela M. Sagalewicz/
Angela M. Sagalewicz
Registration No. 56,113

Pacwest Center, Suite 1900
1211 SW Fifth Avenue
Portland, Oregon 97204
Telephone: 503-222-9981